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experimental gravity, astrophysical signals and their interpretation, nuclear physics, neutron star structure, x-ray and radio observations of pulsars, strong gravity, black holes, gravitational waves, hierarchical Bayesian inference, nonparametric inference, machine learning

Detector Physics

Calibration Uncertainty's Impact on Gravitational-Wave Observations. PRD 105, 082002 (2022)

Calibrating Gravitational-Wave Detectors with GW170817. CQG 36, 12 (2019)

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Strong Gravity

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Probing Extremal Gravitational-Wave Events with Coarse-Grained Likelihoods. ApJ 926, 34 (2022)

Nuclear Physics

Impact of the PSR J0740+6620 Radius Constraint on the Properties of High-Density Matter. PRD 104, 063003 (2021)

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AstroStats

Precision Requirements for Monte Carlo Sums within Hierarchical Bayesian Inference. Arxiv:2204.00461 (2022)

Selection Effects in Periodic X-ray Data from Maximizing Detection Statistics. ApJ 927, 195 (2022)